



Aalborg Universitet

**AALBORG UNIVERSITY**  
DENMARK

## Problem Based Internship in Surveying and Planning Curricula

Sørensen, Esben Munk; Enemark, Stig

*Published in:*  
Shaping the change

*Publication date:*  
2006

*Document Version*  
Publisher's PDF, also known as Version of record

[Link to publication from Aalborg University](#)

*Citation for published version (APA):*  
Sørensen, E. M., & Enemark, S. (2006). Problem Based Internship in Surveying and Planning Curricula. In *Shaping the change: XXIII International FIG Congress : Proceedings* International Federation of Surveyors. <http://www.fig.net/pub/fig2006/>

### General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal -

### Take down policy

If you believe that this document breaches copyright please contact us at [vbn@aub.aau.dk](mailto:vbn@aub.aau.dk) providing details, and we will remove access to the work immediately and investigate your claim.

# **Problem Based Internship in Surveying and Planning Curricula**

**Esben Munk Sørensen and Stig Enemark, Denmark**

**Key words:** Education, Master programme, internship, innovation, problem based learning, interaction between research, education and industry

## **SUMMARY**

The University Programme for the education of Masters in Surveying and Planning has been reorganized. First of all the basic concept of Problem Based Learning at Aalborg University is still dominating the full curricula of the Danish Master Programme in Surveying and Planning. The five year Programme has been divided into a 3 year Bachelor-Programme and after this a 2 year Master-Programme. It has been done as a part of a governmental policy to adapt and fulfil the Bologna-charter in all University Curricula in Denmark. A new element in the Master Programme is a problem-based internship for students at the 9th semester, just before they in the 10th semester is finalizing the five year education by writing their Master-Thesis. The internship gives the student the possibility to stay and work for a three month period in private surveying company, a public authority within land management ore another consulting agency ore company with a surveying ore land management profile. The internship is not focusing on practice training alone. The student has to prepare the internship by formulating a problem reflecting what they want to learn and how the can contribute to develop products, procedures ore procedures which can be used by the host for the internship to develop their capacity within surveying and land management issues. The internship student is hereby obligated to develop new knowledge and do innovation in practice. By doing this the student develop their understanding of professional work being done by the host for the internship. It is expected that the student will develop skills to make their thesis with a profile that will give still more useable end employable new knowledge. When the students are away from the campus, they follow a distance learning course in “Project economy and – leadership”. This course is organized as an e-Learning course and the student has to develop and document their skills to follow distance e-learning courses. It will prepare them to follow and organize self paced learning in virtual environment which will develop their capacity for life-long learning further. The idea behind this new element in the Master Programme is to strength the cooperation between university education and research on the one side and innovation and development in surveying planning industries and companies and related public authorities. The university is asked by the society to serve the community with still more new knowledge and technology transfer from the international research community. The internship and still more real world influenced problem based learning by writing thesis will be and important bridge builder in the following years.

## CONTACTS

Dr. Esben Munk Sørensen  
Professor  
Aalborg University  
Fibigerstræde 11  
9000 Aalborg  
Denmark  
Tel.: + 45 96358347  
Fax: + 45 98156541  
Email: [ems@land.aau.dk](mailto:ems@land.aau.dk)